The slides used in this presentation are intended to be used in an event with verbal elaboration by a knowledgeable presenter. The slides highlight key U.S. product safety requirements for discussion. The text is not a comprehensive statement of legal requirements or policy and should not be relied upon for that purpose. Moreover, with the passage of time, it may not reflect the latest information. You should consult official versions of U.S. statutes and regulations, as well as published CPSC guidance when making decisions that could affect the safety and compliance of products entering U.S. commerce.

# Video: Welcome to the 2021 CPSC Podcast Series - Overview of Children's Sleepwear Requirements



### **Podcast Series 2021**

# Overview of Children's Sleepwear Requirements

This presentation was prepared by CPSC Staff. It has not been reviewed or approved by the Commission and may not reflect its views.



### Biographies



Sylvia Chen
U.S. Consumer Product Safety Commission
Program Manager for East Asia and Pacific
Office of International Programs

Sylvia Chen is responsible for managing the Commission's bilateral and multilateral programs related to consumer product safety in Australia, Japan, Korea, Taiwan, and New Zealand. She also supports the CPSC's work with China. Since she joined the CPSC in 2008, Sylvia has been working with product safety regulators, industry organizations, manufacturers, exporters, buyers, and other sourcing professionals to provide them with guidance and technical support in understanding U.S. requirements, in particular, the latest requirements for consumer products. To that end, she has organized or coordinated many of the agency's international education and outreach activities.

Sylvia has a Bachelor of Arts degree in English and American Literature from Peking University. In 1991, she graduated from The Ohio State University with a Master's degree in East Asian Studies.



Weiying Tao, Ph.D.
U.S. Consumer Product Safety Commission
Textile Technologist
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Dr. Weiying Tao's work at the CPSC focuses on the safety of textile products.

Before joining the CPSC, Dr. Tao conducted research on materials mainly related to textiles for the USDA Southern Regional Research Center. She has more than 20 peer-reviewed publications.

She graduated from Louisiana State University in 1991, with a Ph.D. in Material Science.



The US CPSC is a federal government agency charged with protecting the public from unreasonable risks of injury or death associated with the use of consumer products under the agency's jurisdiction.

https://www.cpsc.gov/s3fs-public/FY2019PBR.pd

CPSC is committed to protecting consumers from products that pose a fire, electrical, chemical, biological, or mechanical hazard.

CPSC's work to improve the safety of the more than 15,000 types of consumer products in its jurisdiction - such as toys, cribs, power tools, cigarette lighters, textiles, and household chemicals – has contributed to a decline in the rate of deaths and injuries associated with consumer products over the past 40 years.

### CPSC's 2021 Podcast Series

Podcast	Topics
#1	Overview of Children's Sleepwear Requirements
#2	Enhancing the Safety of Emerging Technology through Risk Assessment: Wearables
#3	Overview of Battery Safety Requirements
#4	Overview of Gates and Enclosures Requirements
#5	Overview of Consumer Safety and Micromobility Devices
#6	Overview of Cribs and Play Yards Requirements

"Questions on this Presentation? Send an email to CPSCinChina@cpsc.gov"

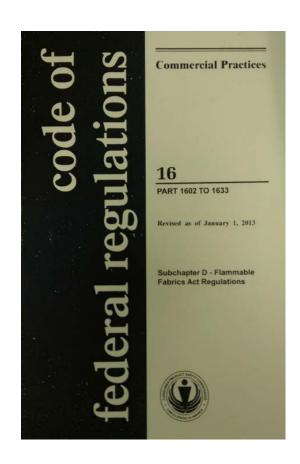
# Overview of Children's Sleepwear Requirements

### **Topics**

- Flammable Fabrics Act
- Scope of Apparel Requirements
  - Children's Sleepwear
- Other CPSA Requirements
  - Certification Requirements
  - Chemical Content
  - Tracking Labels
  - Small Parts
- Summary of Requirements by Product Type
- Resources

# Flammable Fabrics Act (FFA)

- Primary authority for CPSC-regulated textiles
- Focus on flammability performance
- Regulations:
  - Clothing Textiles
    - 16 CFR part 1610
  - Vinyl plastic film
    - 16 CFR part 1611
  - Children's sleepwear
    - 16 CFR parts 1615/1616
  - Carpets and rugs
    - 16 CFR parts 1630/1631
  - Mattresses and mattress pads
    - 16 CFR part 1632
  - Mattress sets
    - 16 CFR part 1633



**Clothing Textiles** 

### **CPSC Children's Sleepwear Requirements**

- Standard for the Flammability of Children's Sleepwear
  - Sizes 0 Through 6X (16 CFR part 1615)
  - Sizes 7 Through 14 (16 CFR part 1616)
- Applies to garments intended to be worn primarily for sleeping or activities related to sleeping
  - > Examples: nightgowns, pajamas, robes
- Specifies a sampling scheme and testing procedures to determine the flammability of children's sleepwear
  - Char length may not exceed 17.8 cm (7.0 in) (average)
  - No single sample may burn the full length

All children's sleepwear fabrics, trim, and garments must be flame resistant and self-extinguish (not continue to burn) when removed from a small, open-flame ignition source.



- What determines whether a garment is considered children's sleepwear?
  - Suitability for sleeping, likelihood of garment to be used for sleeping
  - Garment and fabric features
  - Marketing, merchandising/display, intended use
- Items marketed as "loungewear" or similar terms are also subject to the requirements.
  - https://www.cpsc.gov/s3fs-public/pdfs/blk\_pdf\_sleepwearpolicy.pdf

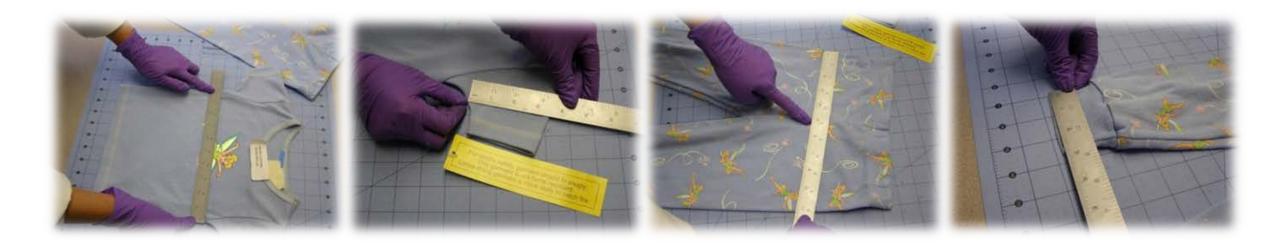
- What does not require sleepwear testing?
  - Diapers and underwear
  - Infant garments (9 months or younger)
  - Tight-fitting sleepwear
  - These categories are defined in §§1615.1(a)(1)-(3) and 1616.2(a)(1)-(2).
- Must meet clothing textile requirements (1610).

- What is an infant garment?
  - Size 9 months or younger (clearly labeled)
  - One-piece garment
    - Does not exceed 64.8 cm (25.75") in length
  - > Two-piece garment
    - Has no piece exceeding 40 cm (15.75") in length

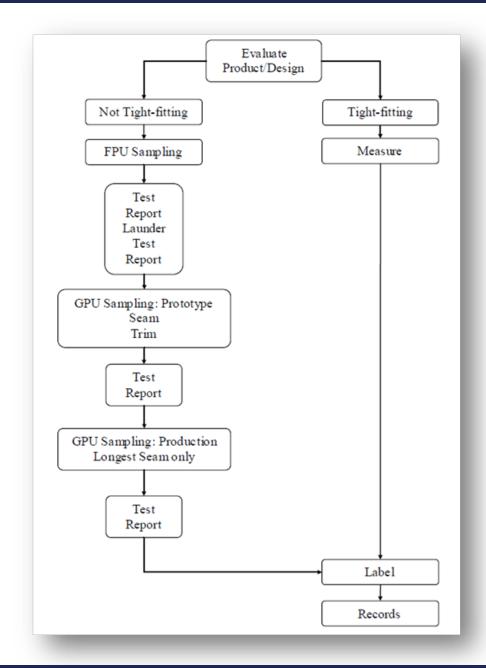
- What is a tight-fitting sleepwear garment?
  - Based on size, meets prescribed maximum dimensions in specific garment locations.
    - Tables can be found in §§1615.1(o) and 1616.2(m).
  - Must meet labeling and hang tag requirements.



- How do you measure a tight-fitting sleepwear garment?
  - > Diagrams 1-3 in 16 CFR parts 1615 and 1616
  - Appendix B in laboratory manual



- Fabric Sampling
  - > Sample
  - > Test
  - Launder 50 times
  - > Test
- Garment Sampling
  - Prototype
    - Test seams
    - Test any trim
  - > Production
    - Test longest seam only



- Specified Production Sampling
  - Multiple stages of testing are required, following prescriptive sampling plans (tightened fabric sampling plan below).

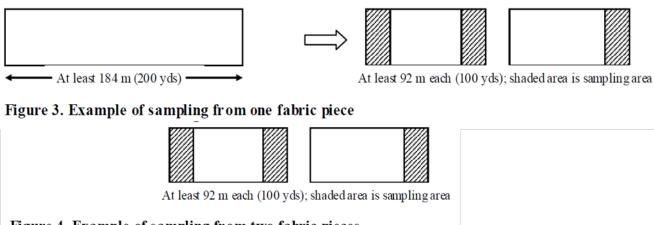


Figure 4. Example of sampling from two fabric pieces

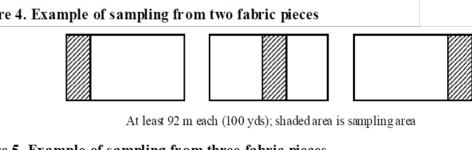


Figure 5. Example of sampling from three fabric pieces

- Fabric Production Unit (FPU)
  - > Either 4 or 6 samples (5 specimens each).
  - > Test half in finished state (as produced or after 1 laundering cycle) and half after 50 laundering cycles.
- Garment Production Unit (GPU)
  - Prototype
    - Seams: for the longest seam type, 3 samples (5 specimens each) and 3 samples (5 specimens each) made up of the other seam types that are least 10 inches long.
    - Trim: for each trim type and orientation, 3 samples (5 specimens).
  - Production (garments)
    - For the longest seam type, 3 samples (5 specimens each).
    - A second set of samples is required for recordkeeping.

A second set of samples is required to be produced and maintained for recordkeeping

- What can make up an FPU?
  - ➤ Up to 4,600 m (5,000 yd) of fabric; 9,200 m (10,000 yd) for a Reduced Sampling Plan
  - Fabrics of different colors **or** different print patterns (not both) of the same fabric
    - To include different colors or prints in a single FPU equivalent performance must be shown through testing.

- What can make up a GPU?
  - > Up to 500 dozen finished garments
    - Must maintain a specific identity exclusive of size, trim, findings, color, and print patterns.
    - A specific identity uses the same fabric, thread, and longest seam type.
    - Solid colors or different print patterns (with same flammability performance based on tests), but not both.
  - Prototype
    - Characterize flammability of all types of seams and decorative trim.
  - > Production
    - Verify the flammability performance of the prototype after full-scale production.

### Seams

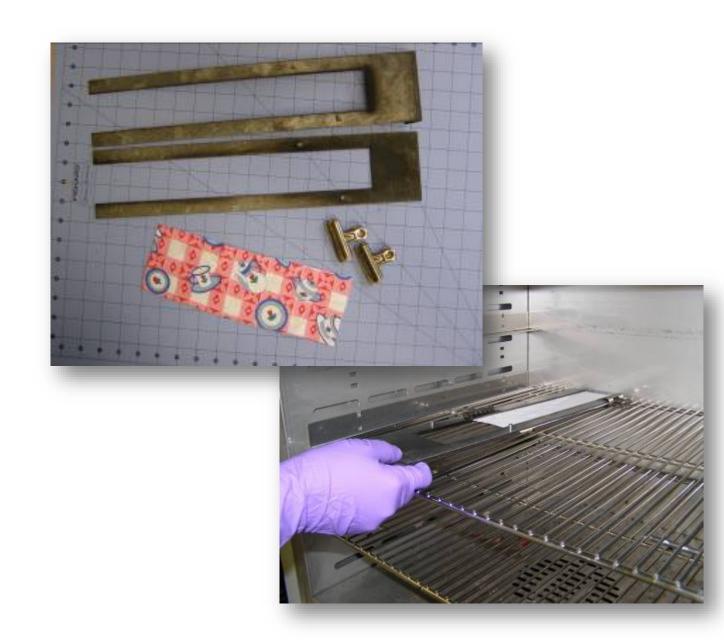
- Prototype stage: Test all seam types at least 10 inches long, including side seams, arm holes, collars, or yokes, whether ruffled, straight, gathered, or a combination.
  - Do not test seams used to attach functional materials or findings or untrimmed coverbind edge finishes or hems.
- Production stage: Only the longest seam type is required to be tested.

### Trim

- ➤ Trim is defined as decorative materials, such as ribbons, laces, embroidery, screen prints, or ornaments.
- Test all decorative trim types at prototype stage.
- Different colors of trim are considered different trim types.
- ➤ Test in a horizontal or vertical configuration, determined by location and orientation on the garment.
- Functional edge bindings, functional findings (ex. zippers, buttons), and individual pieces less than 5.08 cm (2 in) are not required to be tested.

See Appendix E in the children's sleepwear laboratory manual for more information.

- Test Preparation:
  - Specimen size: 8.9 cm x25.4cm (3.5" x 10.0")
  - Conditioning Requirements:
    - Oven Temperature: 105 ± 3°C (221 ± 5 °F)
    - Duration 30 ± 2 minutes



### • Test Procedure:

- ➤ 38 mm (1.5 in) flame impinges on the bottom edge of a specimen mounted vertically for 3 seconds.
- Allowed to burn until the flame self extinguishes or burns entire specimen.
- Char length is measured.



- Recordkeeping (see §§1615.31(e) and 1616.31(d))
  - > General

Sampling plans; FPU or GPU of all garments; test results for all stages of testing (including test results used to include different colors or prints); disposition of any failing or rejected items; fiber content and manufacturing specifications; identification, composition, and details of any FR treatments; sales information.

- > Fabrics
  - Identical set of fabric samples to those tested (and FPU details).
- > Garments

Details of construction, fiber content, and manufacturing specifications; sampling details; identical set of all prototype and production samples to those tested; remains of tested samples; FPU and GPU details and records; a complete untested garment from each style and type.





### Name of product:

Children's nightgowns and two-piece pajama sets

### Hazard:

The children's nightgowns and two-piece pajama sets fail to meet the federal flammability standards for children's sleepwear, posing a risk of burn injuries to children.

520

### Remedy:

Refund

### Recall date:

November 1, 2017

### Recall number:

18-021

pajama set

### Hazard:

The children's nightgowns and two-piece pajama sets fail to meet the federal flammability standards for children's sleepwear, posing a risk of burn injuries to children.

Certification, Chemical Content, Tracking Labels, Small Parts

# **Other CPSC Requirements**

### Certification

- General Use Product
  - General Certificate of Conformity (GCC)
  - Does not require third party testing
  - Applies to adult apparel
- Children's Product
  - Children's Product Certificate (CPC)
  - Requires third party testing by a CPSC-accepted laboratory for all regulations to which the product is subject
  - Applies to all children's apparel

Issued by manufacturer (if domestic) or importer of record. An importer can rely on testing performed by a manufacturer to issue a certificate as long as due care is exercised and all CPSC requirements are met.

### **Chemical Content**

- Lead Content (FHSA)
  - > Products designed and intended primarily for children 12 years or younger
  - Concentration may not exceed 100 ppm
  - > Applies to children's apparel and sleepwear (zippers, buttons, etc.)
- Lead in Paint and Surface Coatings (CPSA)
  - Products designed and intended primarily for children 12 years or younger and some general use furniture
  - Concentration may not exceed 90 ppm
  - Applies to children's general apparel and sleepwear (screen prints)
- Phthalate Content (CPSA)
  - Children's toys and child care articles (products used to facilitate sleeping and feeding for children 3 years or younger)
  - Only certain phthalates
  - Concentration may not exceed 0.1 %
  - > Applies to children's sleepwear and some apparel (bibs)

Third party testing by a CPSC-accepted laboratory is required

### **Chemical Content**

### **Determinations**

- Lead
  - > §1500.91: Certain materials will not exceed lead limits.
  - > Textiles made from certain fiber types, dyed and undyed (including some prints).
- Phthalates
  - ➤ §1308.2: Certain plastics with specified additives will not exceed the specified phthalates content limits.
  - Includes polypropylene and polyethylene.

### **Chemical Content**

Girl's Clothing Recalled by My Michelle Due to Risk of Lead Exposure





### Name of product:

Girl's Tops

### Hazard:

The jewelry and decorative trim attached to the girl's garments contain high levels of lead. Lead is toxic if ingested by young children and can cause adverse health effects.

### Remedy:

Refund

### Recall date:

April 12, 2011

### Recall number:

11-195

### Hazard:

The jewelry and decorative trim attached to the girl's garments contain high levels of lead.

Lead is toxic if ingested by young children and can cause adverse health effects.

### Tracking Labels

For products designed and intended primarily for children 12 years or younger, a permanent, distinguishing mark (tracking label) must:

- Be affixed to the product and its packaging, visible and legible.
- Provide certain identifying information:
  - Manufacturer or private labeler name;
  - Manufacturing location and date of manufacture;
  - ➤ Detailed information on manufacturing (ex. Batch, run, lot or style number) or other identifying characteristics; and
  - ➤ Any other information to facilitate ascertaining the specific source of the product.



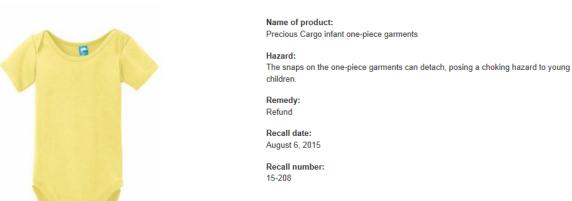
### **Small Parts**

- Intended to prevent deaths and injuries to children from choking
- Products intended for children under 3 years
- Children's Clothing and Accessories
  - Fabrics and buttons are exempted from small parts regulations and testing requirements
    - 16 CFR § 1501.3(d)
    - If buttons are not secure due to poor construction they may pose a substantial product hazard and need to be reported to the CPSC

### **Small Parts**

Home » Recalls »

Precious Cargo Recalls Infant One-Piece Garments Due to Choking Hazard



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Recalled Precious Cargo one-piece garment

### Hazard:

The snaps on the one-piece garments can detach, posing a choking hazard to young children.

Children's Sleepwear

# **Summarization of CPSC Children's Sleepwear Requirements**

# Children's Sleepwear

- CPC and third party testing by a CPSC-accepted laboratory
- Children's Sleepwear (or Clothing Textiles/Vinyl Plastic Film)
- Lead content (zippers, buttons)
- Lead in paint or surface coating (screen printing)
- Phthalate (feet on pajamas; only under 3)
- Tracking label

## **Questions?**

Submit questions in English or Chinese to this podcast:

CPSCinChina@CPSC.GOV



## Resources

## Chinese Resources at cpsc.gov

### https://www.cpsc.gov/zh-CN/Business--Manufacturing/Business-Education

### 企业教育





















作为一个制造、进口和批发消费品的企业,您需要遵守一系列《消费品安全改进法》和消费品安全委员会的其它规定。以下这些步骤将协助引 导您熟悉遵守联邦政府安全法规的程序。

### 第一您制造儿童使用的产品吗?



L宣产品"就是为12岁或者12岁以下儿童设计或者作为主要使用者的消费品。

### 第二什么法规适用于我的产品?



您是为美国消费者制造和进口产品的小企业吗?我们的法规机器人为您提供您制造和进口消费品前应该审阅的重要消费品安全要求。机器 人引导您回答关于您的产品的一系列问题,整个过程约需5分钟时间。点击此处访问法规机器人

### 第三我如何检测和认证我的产品?



し宣产品第三方检测





#### 企业/产品指导

美术材料

石棉

全地形车

沐浴椅

婴儿提篮和婴儿摇篮

床边婴儿床

自行车

自行车头盔

亚硝酸特丁脂

双层床

地毯和垫子

婴儿车

服装

化学品和其它危害物质

儿童睡衣

消费者登记卡

触压粘合剂

婴儿床 (全尺寸)

婴儿床 (非全尺寸)

耐用婴幼儿产品

电器(家用)

# Chinese Resources at cpsc.gov



https://www.cpsc.gov/s3fspublic/HandbookforManufacturingChin ese.pdf (中文版本)

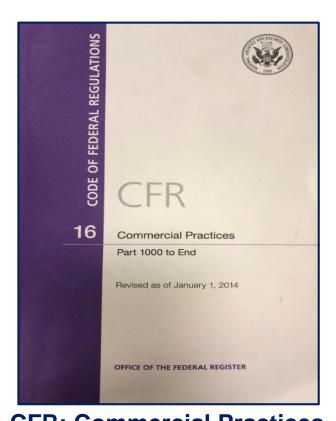
https://www.cpsc.gov/s3fspublic/pdfs/blk\_pdf\_handbookenglishaug05.p df (英文版本)



https://www.cpsc.gov/s3fs-public/THE%20REGULATED%20PR ODUCT%20HANDBOOK\_050613%2 0CHN%20Final\_0.pdf (中文版本)

https://www.cpsc.gov/s3fspublic/RegulatedProductsHandbook.pdf (英文版本)

# Chinese Resources at cpsc.gov



CFR: Commercial Practices
<a href="https://www.govinfo.gov/content/">https://www.govinfo.gov/content/</a>
<a href="pkg/CFR-2017-title16-">pkg/CFR-2017-title16-</a>
<a href="vol2.pdf">vol2/pdf/CFR-2017-title16-</a>
<a href="vol2.pdf">vol2.pdf</a> (英文版本)



### **CPSC Laboratory Manuals:**

https://www.cpsc.gov/s3fspublic/Laboratory-test-manual-16-CFR-Part-1610-Ch.pdf?MhtbUWNy6jmOPx9b6f.RE rt.n.2n\_d\_h (中文版本)

https://www.cpsc.gov/s3fspublic/Flammability%20of%20Clothing% 20Textiles%20Test%20Manual\_1610.pdf (英文版本)

# CPSC Business Resources

- Definition of children's product 16 CFR Part
   1200
- Certificates of conformity 16 CFR Part 1110
- Third-party testing 16 CFR Parts 1107, 1109, and 1112
- Tracking information 15 USC § 2063(a)(5)
- Mandatory reporting requirements 15 USC §2064

CPSC-Accepted
Laboratories Search Page:
www.cpsc.gov/LabSearch





## http://business.cpsc.gov

Online tool designed specifically to help businesses comply with federal consumer product safety requirements.

Asks a series of guided questions, and based on the answers produces a downloadable (PDF) report.

Provides customized guidance with links to product safety regulations that may apply to the product and important information on labeling, certification and testing requirements.

# Regulatory Robot

Regulatory Robot is a tool to help identify which requirements are applicable

> Does not list details of requirements

User inputs product features



Regulatory Robot outputs list of requirements



User references source documents for specific requirements

## **Apparel Resources**

### Regulations

https://www.cpsc.gov/Regulations-Laws--Standards/Statutes/Flammable-Fabrics-Act/

Laboratory Test Manual for 16 CFR Part 1610: Standard for the Flammability of Clothing Textiles

- English: <a href="https://www.cpsc.gov/s3fs-public/Flammability%20of%20Clothing%20Textiles%20Test%20Manual\_1610.pdf">https://www.cpsc.gov/s3fs-public/Flammability%20of%20Clothing%20Textiles%20Test%20Manual\_1610.pdf</a>
- Chinese: <a href="https://www.cpsc.gov/s3fs-public/Laboratory-test-manual-16-CFR-Part-1610-Ch.pdf?MhtbUWNy6jmOPx9b6f.RErt.n.2n\_d\_h">https://www.cpsc.gov/s3fs-public/Laboratory-test-manual-16-CFR-Part-1610-Ch.pdf?MhtbUWNy6jmOPx9b6f.RErt.n.2n\_d\_h</a>

Laboratory Test Manual for 16 CFR Parts 1615 and 1616: Standard for the Flammability of Children's Sleepwear

- English: <a href="https://www.cpsc.gov/s3fs-public/Flammability%20of%20Children's%20Sleepwear%20Test%20Manual\_1615\_1616.pdf">https://www.cpsc.gov/s3fs-public/Flammability%20of%20Children's%20Sleepwear%20Test%20Manual\_1615\_1616.pdf</a>
- Chinese: <a href="https://www.cpsc.gov/s3fs-public/Flammability-of-Childrens-Sleepwear-Test-Manual\_1615\_16-6-Ch.pdf?Qc5b50jB2AmTEfKBj7SzepQWRsqLDN2c">https://www.cpsc.gov/s3fs-public/Flammability-of-Childrens-Sleepwear-Test-Manual\_1615\_16-6-Ch.pdf?Qc5b50jB2AmTEfKBj7SzepQWRsqLDN2c</a>

## **Apparel Resources**

### Drawstrings in Children's Upper Outerwear Must Conform to ASTM F 1816

#### Upper Outerwear

- Is defined by CPSC as clothing such as jackets, ski vests, anoraks, and sweatshirts that generally are intended to be worn over other garments.
- Includes lightweight outerwear that is appropriate for use in warmer climates.
- Excludes underwear, inner clothing layers, pants, shorts, swimwear, dresses and skirts.

#### Head/Neck Drawstrings

- Drawstrings are <u>not allowed</u> at the hood and neck area on children's upper outerwear in sizes 2T through 12.
- Children's upper outerwear should use alternative closures such as snaps, buttons, and Velcro.
- Fully retractable drawstrings are permitted and are exempt from the drawstring requirements.
   They must completely and automatically retract into the garment after being adjusted and released.

#### Waist/Bottom Drawstrings

- Drawstrings at the waist or bottom of upper outerwear in sizes 2T to 16 cannot exceed 75mm (3 inches) in length outside drawstring channel.
- Cord locks, knots, toggles, or other attachments that could pose a catch hazard at the free ends of drawstrings are prohibited.
- Drawstrings that are one continuous string must be bar tacked or stitched through to prevent the drawstring from being pulled through its channel.

Notify suppliers of these requirements and do not manufacture upper outerwear with drawstrings for shipment to the United States.



### Avoid manufacturing children's clothing that will be refused entry or recalled in the United States

- Check garment prototypes before manufacture against all appropriate standards, even designs requested by U.S. importers and retailers. Make modifications for incorrectly designed products to meet U.S. standards.
- ⇒ Third Party Testing
- ⇒ Children's Product Certification
- ⇒ Flammability Requirements for General Wearing Apparel
- ⇒ Flammability Requirements for Children's Sleepwear
- ⇒ Lead Content Requirements
- ⇒ Lead in Paint Surface Coating Requirements
- ⇒ Phthalates Requirements
- Drawstring Requirements in Children's Upper Outerwear
- Tracking information is required on all children's clothing. The information must be permanent.
   Hangtags and adhesive labels are <u>not</u> considered permanent.
- Know your supply chain and keep your suppliers informed of technical requirements and your expectations.
- ALL products that have a defect and may pose a hazard to consumers or create an unreasonable risk of injury or death must be reported to the CPSC immediately by the importer or retailer under U.S. law.

This is a simple summary that highlights some children's clothing requirements and standards and does not replace the requirements found in applicable U.S. laws and regulations. It does not include all of the details in those requirements. Please refer to the regulations and requirements on the CPSC website <a href="https://www.cpsc.gov">www.cpsc.gov</a>. This summary has not been reviewed or approved by the Commission.

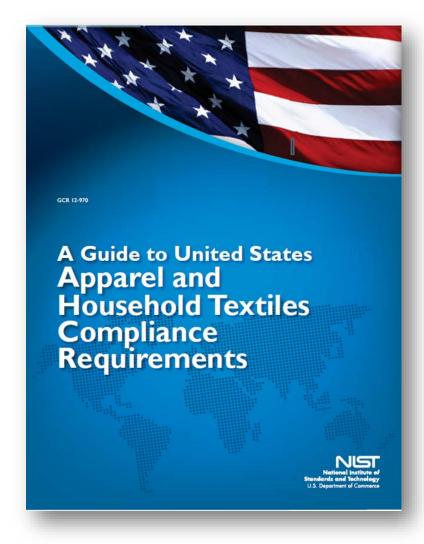
Rev. 2/2014



www.CPSC.gov

https://www.cpsc.gov/safety-education/safety-guides/clothing-and-accessories

## **Apparel Resources**



https://nvlpubs.nist.gov/nistpubs/ir/2016/NIST.IR.8115.pdf